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Purdue Univ Pharm. 1892-93

1892-93.

SCHOOL OF PHARMACY,

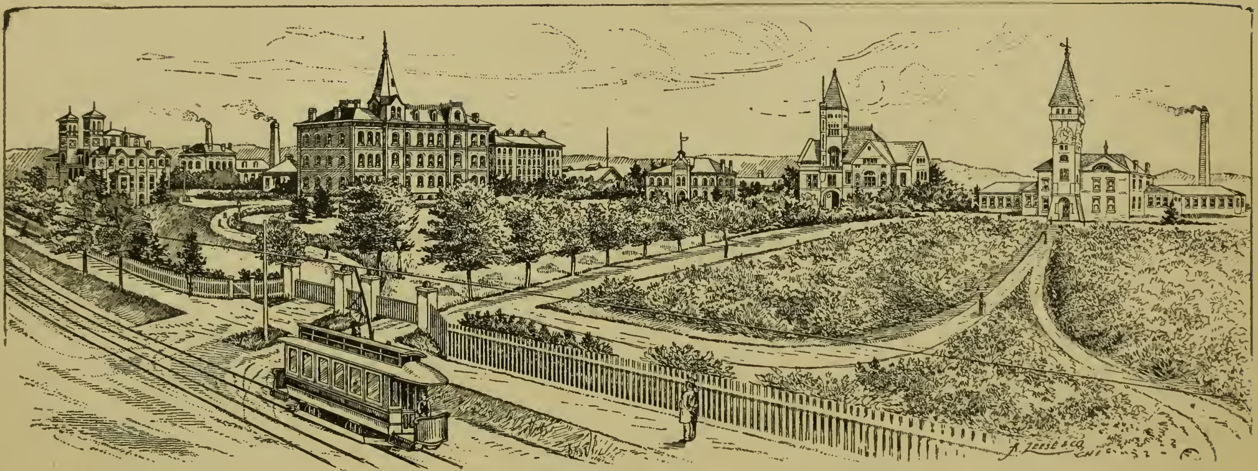
[illegible] 1921

PURDUE UNIVERSITY,

NINTH ANNUAL REGISTER,

LAFAYETTE, IND.

FEB [illegible] 1917



PURDUE UNIVERSITY CAMPUS.

1. Art Hall.　　4. University Hall.　　8. Electrical Laboratory.
3. Engine House.　　5. Men's Dormitory.
2. Chemical Laboratory.　　6. Armory.
7. Mechanical Laboratory.　　9. Engineering Laboratory.

PURDUE UNIVERSITY.

NINTH ANNUAL CATALOGUE

OF THE

SCHOOL OF PHARMACY.

1892-93.

INDIANAPOLIS:
WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.
1892.

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CHARLES B. STUART,
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CALENDAR 1892-93.

September 13, 1892. Entrance Examination.
September 14, 1892. Lectures begin in School of Pharmacy.
December 20, 1892 to January 4, 1893. Christmas holidays.
March 8, 1893. State Examination.
March 14, 1893. Close of session in School of Pharmacy.

FACULTY.

JAMES H. SMART, A. M., LL.D.,
President of the University.

ARTHUR L. GREEN, A. M., Ph. C.,
Dean and Professor of Chemistry.

STANLEY COULTER, Ph. D.,
Professor of Biology.

GEORGE SPITZER, Ph. G.,
Professor of Pharmacy.

DAN T. McDOUGAL, B. S.,
Instructor in Botany.

JULIUS W. STUERMER, Ph. G.,
Instructor in Materia Medica.

PAUL D. BROWN, Ph. G.,
Instructor in Pharmacy.

STATE EXAMINERS.

A. J. DETZER, Ft. Wayne.

LEO ELIEL, South Bend. E. G. EBERHARDT, Indianapolis.

NINTH ANNUAL CATALOGUE—1892-93.

Purdue University is the State Institution of Technology. It is supported by legislative appropriations and by the proceeds of an endowment fund granted by the General Government. It derives its name through legislative enactment from John Purdue, who gave to the State for the use of the Institution one hundred and fifty thousand dollars. It has a permanent endowment fund to the amount of three hundred and forty thousand dollars, and other non-productive property in buildings, lands and equipment to the value of four hundred and forty thousand dollars, and an annual income from State appropriations and U. S. Government appropriations.

It has one hundred and eighty acres of land in its campus and farm, fifteen buildings, well-equipped laboratories, shops, museums, library and reading rooms.

The School of Pharmacy affords a thorough and practical training in pharmacy, chemistry and related subjects. Students are engaged seven or eight hours a day at the University. The morning hours are given to microscopical, prescription and cabinet work, together with lectures and recitations. *In addition, students are engaged in chemical and pharmaceutical work in the laboratory from 12:30 to 5:30 five days every week.* This work is done under the personal supervision of instructors. No lectures in the evening, as this time is devoted to study. The work, as thus arranged, allows no opportunity for clerking in a store.

Special attention is called to the large amount of required laboratory work, much more than is usually required in schools of pharmacy. The required laboratory work in preparations alone being twenty-five hours a week for sixteen weeks.

Instruction includes two courses, or years, of twenty-four weeks each, both of which begin September 14, 1892, and end March 14, 1893.

The instruction as arranged affords also an excellent preparatory course for those who anticipate attending a school of medicine.

Women are admitted on the same conditions as men.

OUTLINE OF REQUIRED WORK.

Course.	SUBJECTS.	No. of Hours in Lecture Room.	No. of Hours in Laboratory.
First Year	1. Inorganic Chemistry	79	100
	2. Qualitative Analytical Chemistry (Inorganic)	45	350
	3. Pharmacy	44	150
	4. Pharmacognosy (Materia Medica)	. . .	24
	5. Therapeutics	24	. . .
	6. Human Anatomy and Physiology	10	28
	7. Doses of Drugs and the Composition of their Preparations	24	. . .
	8. Pharmaceutical Problems	10	. .
	Total hours for the year	236	664
	Average per week	37	
Second Year	9. Organic Chemistry	60	150
	10. Qualitative Analytical Chemistry (Organic)	8	100
	11. Quantitative Analytical Chemistry (Organic)	8	100
	12. Quantitative Analytical Chemistry (Inorganic)	12	150
	13. Physiological Chemistry	12	36
	14. Pharmaceutical Assaying	8	100
	15. Pharmacognosy (Materia Medica)	48	. . .
	16. Botany	12	36
	17. Prescription Work	24	96
	Total hours for the year	204	756
	Average per week	40	

FIRST-YEAR COURSE.

1. Inorganic Chemistry.—Recitations on inorganic chemicals, including source, manufacture, chemical reaction, industrial use, and general practical application. Attention is also given to impurities, pharmacopœial standards and tests. Directions are given for laboratory work. In the laboratory students are independently engaged in the preparation of inorganic compounds, among which are the following: Light magnesium carbonate, heavy magnesium carbonate, calcium oxide, red oxide of mercury, yellow oxide of mercury, sulphurated potassa, green iodide of mercury, dried sulphate of iron, potassium iodide, sodium bromide, precipitated sulphur, ammonium iodide, calcium hypophosphite, zinc acetate, potassium citrate, hydrobromic acid, hydriodic acid, sulphurous acid, nitric acid, zinc chloride, potassium hydrate and hydrochloric acid.

Twenty-five hours for four weeks are allotted for this work.

2. Qualitative Analytical Chemistry (*Inorganic*).—Students learn thoroughly the scientific names and chemical formulæ of the various inorganic compounds—hydrates, oxides, acids and salts. Rules are committed on precipitation and on solubility. These rules are of great value, not merely in analytical work, but also in prescription work, where they aid the student in the study of the incompatibilities of inorganic substances.

The general process for the detection of acids and bases is committed by the student. He is also taught to write the equations for each chemical reaction.

In the laboratory he verifies the rules on precipitation and solubility; he becomes thoroughly familiar with the chemical behavior of the various acids and bases; he repeatedly works through a scheme of separation and identification of the acids and bases; he then subjects twenty-five individual unknowns (mixtures of inorganic compounds) to a qualitative examination, and reports his results to the instructor.

Recitations are conducted on this subject five hours weekly for nine weeks; and laboratory work twenty-five hours weekly for about fourteen weeks.

3. Pharmacy.—Recitations on metrology, heat, etc.; also, on the various processes and manipulations which find application in pharmaceutical practice; as, filtration, evaporation, solution, distillation, comminution, percolation, etc. Working formulæ for the manufacture of galenical preparations; the various methods will be criticised and the merits and demerits of each pointed out to the student.

In the laboratory sufficient time will be devoted to this subject to give the student ample opportunity to not merely acquaint himself with the various processes, but to acquire skill and dexterity in manipulation.

The instructions in this subject comprise forty-four hours in the recitation room, and one hundred and fifty hours in the laboratory. Each student will make, independently, though under the personal supervision of the instructor, the following preparations: 10 samples of pills, 1 cerate, 2 liniments, 2 glycerites, 2 powders, 3 spirits, 2 mucilages, 2 mixtures, 5 samples of suppositories, 1 infusion, 1 decoction, 1 vinegar, 4 solutions, 1 confection, 1 honey, 4 syrups, 5 elixirs, 4 samples of troches, 3 ointments, 3 tinctures, 3 waters, 8 emulsions, 3 plasters, 6 fluid extracts, 3 soluble extracts, 4 extracts, 1 abstract, 1 mass and 1 oleate, making a total of 87 preparations. This, like all the laboratory work in the course, is obligatory; but students who have had much experience and acquired special skill in manufacturing will be excused from part or all of the above and provided with advanced work.

Recitations and laboratory practice in prescription work and extemporaneous pharmacy will conclude this subject.

4. PHARMACOGNOSY (*Materia Medica*).—This subject will continue through both courses. In the first year crude vegetable drugs, as they occur in the market, will be studied. The student will be taught to identify them by physical characteristics—appearance, taste and odor. He will also receive a thorough drill on their Latin and English names, with spelling and pronunciation. Etymology of the names and the history of the drug will also be given in such instances where it is thought to aid in making a permanent impression upon the student's memory.

5. THERAPEUTICS.—Medicines are classified according to their therapeutical uses. The different classes are defined and arranged in a manner which will facilitate their study.

6. HUMAN ANATOMY AND PHYSIOLOGY.—The instruction in this subject comprises:

a. A Series of Lectures upon anatomy, with a brief discussion of the functions of the various parts. Frequent quizzes and written tests are given during the course.

b. Laboratory Work, in which the students investigate for themselves the mammalian structure. In this work it is required that the student demonstrate, so far as the time permits, the points given in the lectures.

7. Doses of Drugs and the Composition of Their Preparations.—This subject is considered of sufficient importance to warrant its separation from *Materia Medica*, in connection with which it is usually taught. A carefully prepared dose-table is given. In this table medicines are grouped in a manner which will enable the student to memorize them with comparative facility. The student is also drilled in the percentage composition of pharmacopœial preparations; as tinctures, spirits, solutions, pills, powders, etc. This knowledge is of great importance in prescription work.

8. Pharmaceutical Problems.—Calculations which find application in manufacturing, or in analytical work, will be taught.

SECOND-YEAR COURSE.

9. ORGANIC CHEMISTRY.—Lectures and recitations on hydrocarbons, alcohols, ethers, compound ethers, organic acids, carbohydrates, fermentation products, natural and artificial gas, petroleum products, aniline dyes, and other organic compounds that are used in pharmacy or in the industrial arts; their formulæ, manufacture, impurities and uses will be considered in the lectures. Lectures on foods, including milk, butter, sugar, drinking water, etc.; their composition, source, adulterations, preservation and healthfulness will form a feature of this series of lectures.

Three hours of recitations weekly for twenty weeks, and twenty-five hours of laboratory work weekly for six weeks will be devoted to this subject.

In the laboratory each student prepares, under the personal supervision of the instructor, such compounds as serve to exemplify the diverse classes treated in the lectures. Among the compounds made are the following: Alcohol, ether, acetic ether, spirits of nitrous ether, chloroform, iodoform, glycerine, nitro-benzole, aniline, acetanilid, benzoic acid, oxalic acid, acetone, oleic acid, zinc oleate, etc.

The student also becomes experienced in the construction of apparatus, and in the conducting of such processes as distillation, fractional distillation, destructive distillation, determination of the boiling and melting point.

10. Qualitative Analytical Chemistry (*Organic*).—The student is taught the separation and identification of the more common organic compounds; as benzole, alcohol, chloroform, glycerine, glucose, sucrose, chloral hydrate, tannic, gallic, tartaric, benzoic and salicylic acids, quinine, strychnine, morphine, caffeine and other alkaloids.

The subject of *Toxicology* (*Organic and Inorganic*) is also classed under this head. Instructions in the use of antidotes, in cases of poisoning, are here given.

Laboratory work consists in the detection of the more common organic and inorganic poisons in presence of other organic material.

As Inorganic Qualitative Analytical Chemistry aids the student in the study of the incompatibilities of inorganic substances, so Organic Analytical Chemistry aids the student in the study of the incompatibilities of organic substances. The utility of this subject to the pharmacist is therefore obvious.

11. Quantitative Analytical Chemistry (*Organic*).—This work consists in the quantitative estimation of alcohol and glycerine, testing of coal oil, assay of spirits of nitrous ether, the quantitative estimation of impurities in organic chemicals, the *analysis of foods*, butter, milk, vinegar, sugar, baking powder, etc.

To be competent to do analytical work of this character is of great import to the pharmacist of to-day; but this competency is not the only gain derived from this work. The student also acquires that care and precision which is of inestimable value to the prescriptionist. Laboratory work in this and the preceding subject together will be carried on for 8 weeks, 25 hours per week.

12. Quantitative Analytical Chemistry (*Inorganic*).—The preparation of standard volumetric solutions, and their use in the estimation of acids, alkalies, iodine,

iron, silver, chlorides, etc. Gravimetric determinations are also made of iron, aluminum, calcium, magnesium, sulphuric acid, hydrochloric acid, etc. Students will devote 25 hours weekly for 6 weeks to this line of work.

13. PHYSIOLOGICAL CHEMISTRY (*Analysis of Urine*) — The chemical and microscopical examination of samples of urine. Recitations on the pathological indications.

14. PHARMACEUTICAL ASSAYING. — The assaying of drugs and the standardizing of their preparation is becoming more and more general, and it is merely a question of time when all toxic drugs and their preparations will be administered in such quantities as to represent a definite amount of their active constituents. Pharmaceutical assaying is, therefore, a subject which no progressive pharmacist should ignore. Four weeks, 25 hours per week, have been allotted to laboratory work in this subject. This will afford ample time for the assay of the more important drugs—cinchona, opium, aconite, belladonna, nux vomica, guarana, ipecac, podophyllum—and their preparations.

15. PHARMACOGNOSY (*Materia Medica*).—The first-year work will be briefly summarized. Drugs of vegetable and animal origin will then be considered in systematic order. Their botanical and geographical origin, history, active constituents and use will be taught. The study of plant principles—gums, resins, oils, gum-resins, oleoresins, balsams, glucosides, alkaloids, etc.—will form a prominent feature of pharmacognosy.

The student will also examine the internal structure of drugs by means of a microscope, and learn the detection of adulterations.

16. BOTANY.—The instruction in this subject comprises:

a. A careful study of the compound microscope and its appliances, together with practice in mounting, sectioning, etc.

b. A study of the various tissues and tissue elements, together with practice in the application of the facts thus obtained in the detection of adulterations in drugs.

c. A study of the gross anatomy of typical plants and their organs.

17. PRESCRIPTION WORK.—One hour each week during the second year is devoted to lectures, recitations and quizzes on the prescription and on incompatibilities. Students are engaged four hours weekly during the second year in reading, interpreting and correcting prescriptions, taken from the files of drug stores. Special attention is paid throughout the year to doses, solubilities of chemicals, and the composition of the pharmacopœial and the more common non-pharmacopœial preparations. The more difficult prescriptions are filled by the student, under the personal supervision of the Professor of Pharmacy.

This work is done in the prescription room—a separate room fitted up as a dispensing pharmacy.

Before entering upon prescription work, students are required to pass a review examination on doses of drugs and the percentage composition of their preparations. This examination will be held at the beginning of the second year.

The frequency with which examinations and quizzes are conducted in each subject by the instructor in charge, constitutes a characteristic of the courses; thus rendering special quiz-classes superfluous.

During laboratory hours the instructors are in constant attendance, to direct the student in his work whenever necessary.

APPLIANCES.

The University has abundant accommodations in the various laboratories. In the chemical and pharmaceutical laboratory only one student is assigned to a table. The School allows the free use of chemical and pharmaceutical apparatus, of compound microscopes and analytical balances.

All the important pharmaceutical and chemical journals in the English language are kept on file for the use of the student. He has also access to the general library containing over 5,000 volumes.

CABINET.

This cabinet contains over 1,000 specimens, the specimens of crude vegetable drugs alone number 600.

There are also 200 specimens of organic chemicals, 100 of inorganic chemicals, and 200 of pharmaceutical preparations; a total of 1,100 specimens accessible to the students at all hours of the day. Students do not examine these samples merely as a matter of interest, but they are required to recognize most of them (about 800) through a series of examinations. This cabinet is termed our "working cabinet." The School has, also, an accurate "reference cabinet," which was presented by Eli Lilly & Co.

PRESCRIPTION ROOM.

The purpose of this School is to make the course preeminently practical. It is with this purpose in view that the laboratory work is made so prominent a feature. It is with this purpose in view that a separate room has been fitted up as a dispensing pharmacy, in which students receive manual training in dispensing and in extemporaneous pharmacy.

Dispensing is taught in all its phases, from the purely mechanical work of folding filters and powder-papers, putting up neat packages, etc , to the very intricate operations occurring in extemporaneous pharmacy.

REQUIREMENTS FOR ADMISSION.

Candidates for admission must have a good knowledge of the common English branches. In arithmetic special familiarity with denominate numbers, fractions, percentage and proportion will be required. Due weight will also be given to the applicant's penmanship and English composition. All applicants must be present for examination on Tuesday, September 13, at 9 A. M.

Those presenting satisfactory certificates of proficiency are exempt from entrance examinations. No experience in a drug store is required for entrance.

Applicants may with profit read Parts I, II and V of Remington's Practice of Pharmacy, yet this is not required for admission.

No one will be allowed to enter the School of Pharmacy from the other Schools of Purdue University without special permission.

STATE EXAMINATION.

This examination is held during the latter part of the second year, and is conducted by the Committee on Education of the Indiana Pharmaceutical Association.

GRADUATION.

The degree of Graduate in Pharmacy (Ph. G.) will be conferred upon each student not less than twenty-one years of age who successfully completes the required course, and passes the State Examination.

EXPENSES.

The expenses are far less than in the majority of similar schools, while unusual facilities are afforded for laboratory practice. The year is divided into two terms; the first commences September 14, 1892, and the second January 4, 1893.

The fees are as follows, payable in advance:

FIRST TERM.

Entrance fee	$5 00
Incidentals	5 00
Chemicals	14 00

SECOND TERM.

Incidentals	$5 00
Chemicals	10 00

No extra fees are required of students who come from other States.

There will also be charges for breakage, and for such chemicals as may be required in unusual quantities. To cover such expenses, a laboratory deposit of $15.00 is required at the time of admission. Owing to the large amount of laboratory work, the deposit has been raised from $10.00 to $15.00; but the actual charges are the same, and will be regulated, as heretofore, by the amount consumed by the student. The average amount returned to students at the end of the year represents about one-half of the deposit.

Fifty cents of this deposit may be used for material consumed in laboratory work in anatomy.

Good board may be had for $2.75 a week, and rooms for 75 cents per week.

The total expense of board, room rent, fuel, fees, books and washing for twenty-four weeks need not exceed $150. Students of the School of Pharmacy must provide their own rooms in the village of West LaFayette, as they can not be accommodated in the college dormitory.

A fee of $5.00 will be required for the diploma, and should be paid to the Secretary before commencement week.

A complete catalogue of Purdue University, containing full information of the various Schools, laboratories and museums, will be sent on application.

Letters of inquiry may be addressed to

ARTHUR L. GREEN,
Dean of Purdue School of Pharmacy,
LaFayette, Ind.

TEXT BOOKS.

The following text books (the latest editions) are required for use:

First Year—

United States Dispensatory.
Prescott's First Book in Qualitative Chemistry.
Tidy's Handbook of Modern Chemistry (second edition).

Second Year—

Lyons' Pharmaceutical Assaying.
Sexton's Quantitative Analysis.
Jenning's Practical Urine Testings.
United States Dispensatory.
Streatfield's Organic Chemistry.

STUDENTS 1891-92.

SECOND-YEAR STUDENTS.

Joseph D. Bartlett,	*Sunapee, N. H.*
Frank M. Best,	*Liberty.*
John Bright,	*Treaty.*
Albert H. Caulkins,	*LaFayette.*
Frank Cavins,	*Bloomfield.*
Miss Love E. Crampton,	*Monticello.*
George E. Cravens,	*Bloomfield.*
James F. Fiske,	*Chester, N. H.*
Nathan K. Garhart,	*Indianapolis.*
Edward L. Green,	*Nulls Mills.*
B. Franklin Griffith,	*Huntington.*
Miss Nina B. Hart,	*DeForest.*
Charles L Hoffman,	*West LaFayette.*
Benjamin M. Hoak,	*Pittsboro.*
Edward Kadel,	*Terre Haute.*
John W. McMahan,	*LaFayette.*
John H. Miller,	*Vincennes.*
John Roscoe Mutz,	*Edinburg.*
Frank P. Reichard,	*Danville.*
Emil Reyer,	*Indianapolis.*
George B. Sloan,	*Indianapolis.*
Frank M. Thorn,	*Huntington.*
Thomas A. West,	*Bloomfield.*

Total, 23.

FIRST-YEAR STUDENTS.

Grafton C. Allen,	*Lebanon.*
Willie U. Anderson,	*Manson.*
George W. Bates,	*Palmyra, Mo.*
James Braden,	*Joppa, Mich.*
Joseph E. Carson,	*Badger.*
Frank B. Carter,	*Peru.*
John C. Clark,	*Carthage.*
Joseph L Cramer,	*Oxford, Ohio.*

Harry R. Crillman,	*Indianapolis.*
Joe. K. Cromley,	*Gallipolis, Ohio.*
Maynard M. Erb,	*Bentley.*
Charles E. Forkner,	*Anderson.*
John H. Fox,	*Ligonier.*
Jacob R. Francis,	*Edinburgh.*
Edward M. Galliher,	*Muncie.*
George L. Garver,	*Connersville.*
Walter L. Gerhart,	*LaFayette.*
George W. Haines,	*LaFayette.*
Walter E. Hardman,	*North Manchester.*
Isaac M. Henderson,	*Sharpsville.*
Herbert E. Hess,	*Plymouth.*
Gus Hess,	*Connersville.*
Justus C. Houser,	*California, Mo.*
Orley E. Kennon,	*Bartonia.*
Guy V. Lake,	*Muncie.*
James E. Layton,	*Linden.*
John A. Leechman,	*West LaFayette.*
Jacob A. Long,	*Bluffton.*
Miss Myrtle L. McMahan,	*LaFayette.*
Charles O. Maple,	*Shelbyville.*
Henry A. Menager,	*Gallipolis, Ohio.*
Loren B. Miller,	*Indianapolis.*
Sterling S. Minor,	*Clifton Hill, Mo.*
Henry H. Neal,	*Thorntown.*
L. S. Peters,	*Mulberry.*
Enno E. Powell,	*Napoleon, Ohio.*
Fred R. Robinson,	*Attica.*
John H. Rockwood,	*Goodland.*
Frank M. Smethurst,	*Warren.*
Earl S. Smith,	*Boswell.*
Elbert S. Stephens,	*Newport.*
William O. Strother,	*Mound Valley, Kan.*
Ruskin O. Tidrick,	*Bringhurst.*
James H. Wellington,	*Kentland.*
Wood Wiles,	*Shelbyville.*
Fred A. Withers,	*Rising Sun, Ohio.*
Leonard D. Worden,	*Albion.*
Total, 47.	

SUMMARY.

Second year	23
First year	47
Total	70

ALUMNI.

1886.

Ernest G. Eberhardt, analytical chemist for Eli Lilly & Co.

Manuel Jay, physician, 757 South Michigan Street, South Bend, Ind.

John Kennedy, in charge of prescription department of R. G. Moore, Vincennes, Ind.

Edwin J. Mowry, pharmacist, Columbia City, Ind.

Louis H. Schulmeyer, chemist for Daniel Stewart, wholesale druggist, Indianapolis. Address, 725 N. Tennessee Street.

Bert D. Westenfelder, chemist to the American Oak Leather Co., Cincinnati, O. Address, 247½ Clinton Street.

Emory J. Yeager, prescription clerk, with Dr. A. A. Wells, LaFayette, Ind.

1887.

Millard Caldwell, in the firm of Krauss & Caldwell, Hartford City, Ind.

William H. Dickinson, pharmacist, No. 626 West Lake Street, Chicago.

Charles L. Hackett, in the firm of John Hackett & Son, Roanoke, Ind.

William M. Ross, with Melendy & Lyman, 241 Nicollett Ave., Minneapolis, Minn.

Albert W. Shoup, pharmacist, West LaFayette, Ind.

1888.

Peter H. Fetters, in firm of Fetters & Morrison, South East Street, Indianapolis.

Samuel Kennedy, physician, Shelbyville, Ind.

George C. Morrison, in firm of Fetters & Morrison, Indianapolis.

William H. Vawter, in the firm of Vawter & Warner, corner Main and Sixth Streets, LaFayette, Ind.

1889.

Aden L. Cavins, pharmacist, Bloomfield, Ind.

Merit Post, prescription clerk, with C. P. Post, Lowell, Ind.

Charles W. Shafer, prescription clerk, with Dr. H. B. Cronk, Cincinnati, O. Address, 439 Main Street.

George Spitzer, Professor of Pharmacy at Purdue School of Pharmacy.

Cortice M. Warner, in the firm of Vawter & Warner, corner Sixth and Main Streets, LaFayette, Ind.

Don Carlton Whitehead, pharmacist, Jerry City, Ohio.

1890.

Robert W. Allen, in firm of Allen & Allen, Mulberry, Ind.

Elden Beasley, pharmacist, Union, Ind.

Moses T. Boggs, with H. E. Zimmer, 78 E. Washington Street, Indianapolis.

Bert Critz, prescription clerk, with S. M. Smith, Osgood, Ind.

John E. Dunlavy, prescription clerk at Allen's Drug Store, Greencastle, Indiana.

William E. Easterday, prescription clerk at Some's Pharmacy, N. E. corner Sixth and Ohio streets, Terre Haute, Ind.

Joseph L. Feibleman, with Daniel Stewart, Indianapolis. Address, 226 E. New York Street.

Henry H. Harris, prescription clerk, with C. H. Shad & Co., corner Washington and Noble streets, Indianapolis, Ind.

George W. Lacey, with Dr. S. T. Yount, Chicago, Ill.

Alvin H. Leeser, prescription clerk, with Meyer Bros., Ft. Wayne, Indiana.

Henry W. Meinzen, prescription clerk, with F. J. Miller, Ft. Wayne, Indiana.

Frank Riggs, in firm of Riggs & Plogsterth, Marion, Ind.

Frank E. Shattuck, prescription clerk, with The Buntin Drug Co., Terra Haute, Ind.

Marion A. Stout, prescription clerk, with Charles C. Deam, Bluffton, Indiana.

Charles W. Watkins, prescription clerk, with S. Mühl, corner 13th and Illinois streets, Indianapolis, Ind.

John M. Westfall, formerly prescription clerk with David Hilt, LaFayette, Ind.

1891.

Joseph H. Anderson, in firm of Gillin Bros. & Anderson, Doon, Iowa.

Jonathan M. Bauer, in charge of H. H. Flandermeyer's Pharmacy, No. 839 Superior Street, Cleveland, Ohio.

Isaac D. Bonnett, in the firm of I. D. Bonnett & Co., Shreve, Ohio.

Paul D. Brown, Instructor in Pharmacy at Purdue School of Pharmacy.

Charles C. Crampton, attending College of Physicians and Surgeons, Chicago, Ill.

August Diehl, Pharmacist, No. 10 4th Street, LaFayette, Ind.

William S. Green, in charge of S. Mühl's Pharmacy, corner 7th and Alabama Streets, Indianapolis, Ind.

William J. Hart, prescription clerk, with H. W. Kempt, corner Lincoln Avenue and Governor Street, Evansville, Ind.

Alvin L Hills, formerly with Dr. A. A. Wells, LaFayette, Ind.

James W. Kyle, prescription clerk, with The Hogan-Johnson Drug Co., LaFayette, Ind.

Joseph O. McCarty, fomerly with W. S. Thomas, Indianapolis, now in businsss, 1211 Seventh street, Sacramento, Cal.

John S. Max, formerly with J. A. Campbell, Hartville, Mo., now studying medicine.

Oscar A. Means, prescription clerk, with W. S. Thomas, No. 400 Massachusetts Avenue, Indianapolis, Ind.

George C. Metzger, deceased.

Louis W. Plogsterth, in the firm of Riggs & Plogsterth, Marion, Ind.

Fred P. Pyke, prescription clerk with Thornburg & Allen, No. 190 Fort Wayne Avenue, Indianapolis, Ind.

Wildey F. Reynolds, prescription clerk with Charles W. Eichrodt, corner of First and West Streets, Indianapolis, Ind.

David L. Rife, prescription clerk with W. W. Scott, No. 667 Virginia Avenue, Indianapolis, Ind.

Harry E. Sharrer, prescription clerk, with M. M. Murphy, Delphi, Ind.

James R. Spivey, pharmacist, Oxford, Ohio,

Frank O. Stabler, formerly chemist for Ingram & Co., Detroit, Mich.

Julius W. Stuermer, instructor in Materia Medica at Purdue School of Pharmacy.

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